



Fermilab

Particle Physics Division/CDF Upgrade Project

**Specification for
TTL to PECL
1 To 9 Fanout Module**

Introduction

The COT Calibration system will require several custom modules. This paper will describe the requirements of a PECL fanout module. The Fanout module will receive a TTL input from a Berkley Nucleonics VME Digital Delay Generator. It will then fan that input out to 9 differential PECL pairs driven out 9 pairs of front panel BNC connectors.

Additionally, there is a need for a NIM to TTL converter on the module. The TTL output could be used to drive the fanout input in a diagnostic mode.

The fanout module will be built in a 9Ux400mm VMEbus format and use only the 5V and -12V standard voltage pins. No VMEbus functions are included on the bus.

A block diagram of the module, along with a sketch of the front panel is shown below:

